



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEX Scheme visit [www.iecex.com](http://www.iecex.com)

### Ex COMPONENT CERTIFICATE

Certificate No.: IECEX TUR 18.0024U Issue No: 1 Certificate history:  
Status: Current Page 1 of 4 Issue No. 1 (2019-05-08)  
Date of Issue: 2019-05-08 Issue No. 0 (2018-11-05)  
Applicant: Weidmüller Interface GmbH & Co. KG  
Klingenbergstraße 16  
32758 Detmold  
Germany  
Ex Component: Terminals AKZ/AKE Series

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: Ex eb

Marking: Ex eb IIC Gb

Approved for issue on behalf of the IECEX  
Certification Body:


Christian Mehrhoff

Position:

Assigned certifier

Signature:  
(for printed version)

Date:

  
2019-05-08

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEX Website](http://www.iecex.com).

Certificate issued by:

TUV Rheinland Industrie Service GmbH  
Am Grauen Stein  
51105 Cologne  
Germany





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Manufacturer: **Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
32758 Detmold  
Germany

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex Component covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The Ex Component and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

**IEC 60079-0 : 2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-7 : 2017** Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the Ex Component listed has successfully met the examination and test requirements as recorded in*

Test Report:

[DE/TUR/ExTR18.0024/01](#)

Quality Assessment Report:

[NL/DEK/QAR12.0052/06](#)



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## Schedule

**Ex Component(s) covered by this certificate is described below:**

The terminal blocks of the AKZ/AKE- series are for the connection of copper conductors in enclosures. The type of protection is increased safety, "e" - Level of Protection "eb" (EPL "Gb").

The assessment covers the following types:

AKZ 1.5\*, AKZ 2.5\*, AKE 2.5, AKZ 4\*, AKE 4, AKZ 4 WEMID\*

For further information see attachment.

### SCHEDULE OF LIMITATIONS:

See attachment.



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

- Standard update to IEC 60079-0 Ed.7 from 2017 and to IEC 60079-7 Ed. 5.1 from 2017.
- Additional configurations of cross connections were assessed to meet the requirements of the listed standards.

**Annex:**

[DE-IECEX\\_TUR\\_IECEX TUR 18.0024U\\_X\\_01\\_Attachment\\_2019-05-08\\_V02.pdf](#)



Attachment to Certificate  
IECEX TUR 18.0024U  
Revision 1

Attachment to Certificate IECEX TUR 18.0024U

**Device:** Terminals  
**Type:** AKZ/AKE Series (details refer to Technical Data section)  
**Manufacturer:** Weidmüller Interface GmbH & Co. KG  
**Address:** Klingenbergstraße 16  
32758 Detmold  
Germany

**General product information:**

The terminal blocks of the AKZ/AKE- series are for the connection of copper conductors in enclosures. The type of protection is increased safety, "e" - Level of Protection "eb" (EPL "Gb").

The assessment covers the following types:

AKZ 1.5\*, AKZ 2.5\*, AKE 2.5, AKZ 4\*, AKE 4, AKZ 4 WEMID\*

**Optional accessories:**

end plate	AP AKZ...*
end bracket	EW 15*
	EW 15/2*
	AP AKZ...*
partition plate	TW AKZ...*
Terminal rail	TS 15/ acc.to IEC 60715
Cross-connection	Q 2 AKZ...
	Q 3 AKZ...
	Q 4 AKZ...
	Q 10 AKZ...

\*: in all colours

...: 1.5, 2.5 or 4

**Technical data:**

Operating temperature ranges for AKZ 4 WEMID:

	-60°C up to +110°C
T6	-60°C up to +40 °C
T5	-60°C up to +55 °C
T4	-60°C up to +70 °C

for AKZ 1.5, AKZ 2.5, AKZ 4, AKE 2.5, AKE 4:

	-50°C up to +85°C
T6	-50°C up to +40 °C
T5	-50°C up to +45 °C
T4	-50°C up to +45 °C

See manufacturer's installation instructions of each single terminal type for details.



**“Schedule of Limitations:”**

- The AKZ/AKE-series products are suitable for use in enclosures in atmospheres with flammable gases or combustible dust. For flammable gases these enclosures must satisfy the requirements according to IEC 60079-0 and IEC 60079-7. For combustible dust the enclosure must satisfy the requirements according to IEC 60079-0 and IEC 60079-31.
- The enclosure shall be constructed to block all sun and UV light from affecting the terminal blocks. The terminal blocks shall be placed inside a suitable certified IP54 enclosure in type of protection “eb” for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable certified enclosure (IEC 60079-31) in type of protection “t”.
- Under normal operating conditions the temperature rise of the terminal blocks is maximum 40 K, measured at the maximum permitted rated current. Due to the above mentioned, the terminal blocks may be used in apparatus of temperature classes T6..T1 as long as the terminal block ambient temperature range is not exceeded. No part of terminal block must exceed 110°C under any condition in combination with AKE no part of terminal block must exceed 85°C under any condition.

AKZ 1.5, AKZ 2.5, AKE 2.5, AKZ 4, AKE 4	AKZ 4 WEMID
T6 (- 50°C ... +40 °C)	T6 (- 60°C ... +40 °C)
T5 (- 50°C ... +45 °C)	T5 (- 60°C ... +55 °C)
T4 (- 50°C ... +45 °C)	T4 (- 60°C ... +70 °C)

- When using the AKZ/AKE-series products especially with other terminal blocks series or sizes or accessories the requirements for clearance and creepage distances according to table 1 of IEC 60079-7 must be observed. Regarding the use of covers, cross-connectors and end brackets the instructions of the manufacturer must be followed.
- For cross connection accessories current rating, resistance across the terminal please refer to the manufacturer’s installation instructions.
- No other wire sizes or types than the ones specified in instructions must be used. The terminal blocks must either be mounted next to another block of the same type and size or with an end plate.
- If smaller conductor cross sections than the rated conductor cross sections are used, then the corresponding lower current shall be stated in the Certificate of the complete apparatus.